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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,278	06/11/2002	Helmut Brehm	5003073-026US1	7874

29737 7590 05/13/2003

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EXAMINER

ASINOVSKY, OLGA

ART UNIT

PAPER NUMBER

1711

DATE MAILED: 05/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

10/069,278

Applicant(s)

BREHM ET AL.

Examiner

Olga Asinovsky

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 19 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,5-15 and 17-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-3,5-15 and 17-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) g.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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2. Claims 1, 6-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Dohmen et al U.S. Patent 5,712,316.

The rejection is set forth at page 4-6 of the office action mailed on 12/19/02, paper No. 7 and is incorporated here by reference.

3. Applicant's arguments filed 03/19/03 have been fully considered but they are not persuasive.
4. The applicants amend claim 1 by including the definition of continuous polymerization process "wherein a parameter of the continuous polymerization process is varied by increasing and decreasing the parameter in a recurring pattern, during the polymerization process."

- a. The applicants' argument is that Dahmen does not disclose the specified parameter by "increasing and decreasing the parameter in a recurring pattern" during the process. The inventors are referring to the present specification and arguing that the product by the process in the present claims are produced by varying the metering rate of polyethylene glycol. And a said product has better permeability properties (page 5 in applicants' remarks) than the powder polymer

in Dahmen's invention. The argument is that the present invention was to improve the absorbency properties by varying at least one parameter during the polymerization according to a recurring pattern. However, polyethylene glycol can be present in claim 1 in zero amount. The formulation of the composition in Dahmen is the same that it is in the present claim 1. Water-soluble polymers such as polyvinyl alcohol, polyglycols or starch can be present in the amount of ~~about 1 to 5 wt. %, column 4, line 67. The powdery polymer can be produced by~~ continuous polymerization process, column 6, line 15. The continuous polymerization process is inherently included adding at least one component continuously. The desired properties are depending on the temperature and the residence time, and the kind of reactant, column 6, lines 7-8. The applicants argue that the present powder polymer has higher AUL (absorption under load) and higher gel permeability (GP) than the powdery polymer in Dahmen's invention, page 6 in applicants' remarks. This argument is not persuasive because Dahmen discloses the same composition having the ingredients in the same amounts, and the product is produced by a continuous polymerization process. The statement "wherein a parameter of the continuous polymerization process is varied by increasing and decreasing the parameter in a recurring pattern, during the polymerization process" is inherent in a continuous polymerization process in Dahmen.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 5-15 and 17-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dahmen et al U.S. Patent 5,712,316.

The rejection is set forth at pages 6-7 of the office action mailed on 12/19/02, paper No. 7 and is incorporated here by the reference.

7. Applicant's arguments filed 03/19/03 have been fully considered but they are not persuasive.

8. The applicants' argument is substantially the same that is in the paragraph (a) in the rejection under 102(b) above. The argument is that Dahmen fails to disclose "to vary a parameter by increasing and decreasing the parameter in a recurring pattern where in a parameter may be a polymerizable monomer of part a), the percentage of the unsaturated monomer of part b), amount of catalyst used in the polymerizable process; amount of molecular weight modifier used in the polymerizable process; the pH value; degree of neutralization of the monomer solution during the polymerizable process; and graft basis of the polymer" during the polymerization process as required in the present claims. These arguments are not persuasive. There are not claimed catalyst, the pH value and graft basis of the polymer in the present claims. The term a "parameter" could be considered as a process condition parameter such as a temperature, residence time

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and the amount of the ingredients. All of these parameters are readable in Dahman's invention. The present claims do not disclose "metered amount" of the ingredients according to a recurring pattern. Only difference in Dahmen is that Dahman discloses that the polymers may be manufactured by continuous or discontinuous processes, column 6, lines 14-16. Also, Dahmen does not disclose that the polymerization is effected on a moving support for the present claims 5 and 17. It would have been obvious to one of ordinary skill in the art to select the continuous polymerization process in Dahmen's invention by using a suitable mixer having a moving support since different types of mixers can be used within the same expectation of adequate results.

9. Claims 1-3, 5-15 and 17-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dahman et al U.S. Patent 5,712,316 in view of Yada et al U.S. Patent 4,690,788.

The rejection is set forth at page 7 of the office action mailed on 12/19/02, paper No. 7 and is incorporated here by references.

10. Applicant's arguments filed 03/19/03 have been fully considered but they are not persuasive. The argument is that combining the teachings of Dahmen and Yada is not proper because Dahmen fails to disclose varying the defined parameters during the polymerization process as required in the present claims. First, the amendment is disclosing "by continuous polymerization process wherein a parameter of the continuous polymerization process is varied by increasing and decreasing the parameter in a recurring pattern during the polymerization process." A recurring pattern

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is a moving support for the present claims 5 and 17. A parameter can be any at least one parameter in a process condition in the present claims. Second, Dahmen and Yada disclose the analogous continuation polymerization process for obtaining particles of polymer gel wherein a polymer is produced by polymerizing an aqueous solution of water-soluble vinyl monomer. In Yada water-soluble vinyl monomers can be (meth)acrylic acid and their salts such as alkali metal salts, column 3, lines 60-62. A ~~process is a continuous polymerization by continuously supplying an aqueous solution~~ containing a monomer and a photoinitiator onto a moving support, column 4, lines 50-53. Both references disclose at least one the same parameter such a continuous supplying the same polymerizable monomer. It would have been obvious to one of ordinary skill in the art to use a polymer gel in Dahmen which can be manufactured on the moving support as suggested by Yada since the continuous polymerization process in Dahmen can include any suitable equipment=mixer, column 5, lines 66-67.

The prior art has been considered and made of record.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Asinovsky whose telephone number is 703-308-0041. The examiner can normally be reached on 9:00 to 5:30 pm.

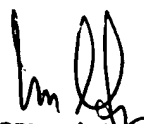
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 703-308-2462. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7718 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

O.A.  
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May 11, 2003

Olga Asinovsky  
Examiner  
Art Unit 1711

  
James J. Seidleck  
Supervisory Patent Examiner  
Technology Center 1700